representatives. In the ENGLER arrangement, based on floral characters, they are one of the three most primitive groups of the Archichlamydeae. Most of the eastern representatives of the group have uniseriate rays and "terminal" parenchyma ("only at the end of the annual ring") in the stem cylinder, but in the conservative regions multiseriate rays and vasicentric parenchyma are found. This latter combination is found also in the stem cylinders of certain western forms. The conclusion from these facts is that multiseriate rays and vasicentric parenchyma represent the primitive condition of the group, and that their present simple structure is due to a reduction from a more complex structure. This means that, according to the testimony of vascular anatomy, the Salicales should be transferred from a very low position to a relatively high one among the Archichlamydeae.—J. M. C.

The fruit of Compositae.—LAVIALLE[16] has begun the publication of a volume of observations on the development of the wall of the akene of the Compositae, a complex of testa and pericarp. The first chapter and part of the second have appeared in the *Annales* as cited. Since 298 species, representing 65 genera, have been studied, the number of observations are very great. Just what the value of them will be is also obvious. In the account of the "actual state of knowledge of the structure of the fruit of Compositae," the actual state of knowledge of the author is very apparent. The citations are few, and apparently no contributions in English were available.—J. M. C.

A new Cordaites.—Miss BENSON[17] has described a new species of *Cordaites* from a fairly well preserved specimen obtained from the coal mines at Shore, England. It is compared with related species, and the intimation is given that along with *C. Wedekindi* Felix it may represent a new genus, whose seeds are already suspected to be those of a *Mitrospermum* closely associated with it in the deposit. The whole leaf is said to have "a markedly xerophilous character."—J. M. C.

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[16] LAVIALLE, P., Recherches sur le développement de l'ovaire en fruit chez les Composées. Ann. Sci. Nat. Bot. IX. **15:** 39–64. 1912.

[17] BENSON, MARGARET, *Cordaites Felicis*, sp. nov., a cordaitean leaf from the Lower Coal Measures of England. Ann. Botany **26:** 201–207. *pl. 22. fig. 1.* 1912.